

**AIR TOXIC EMISSION INVENTORY AND
DISPERSION MODELING FOR CHESTER, PENNSYLVANIA**

**Contract No. 68D30032
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APPENDIX H. GUIDE TO THE EMISSIONS AND MODELING DATA BASE

This appendix is intended to serve as a guide to the data base provided for the air toxic emission inventory and the dispersion modeling. The main air toxic inventories are provided in the form of data base (.DBF) files, which contain the source identification and toxic profile used for each emission point included in the original inventory. For point sources, the VOC toxic inventory is in the file VOC_SPEC.ZIP and the PM toxic inventory is in the file PM_SPEC.ZIP. The toxic inventories for additional sources that were not included in the original inventory, primarily for incinerators located in Delaware County, are presented in the form of several spreadsheet files in VOCWK1.ZIP and PMWK1.ZIP. For area sources, the toxic inventories are in the files AREA_VOC.ZIP and AREA_PM.ZIP. The main output products of the dispersion modeling are the post-processed plotfiles, which all begin with the letter Z. This includes the results of the post-processor that combines point source and area source contributions. For example, the ZCOPLT.ZIP file contains the post-processed plotfiles for carbon monoxide (CO) and the ZVOCP-01.ZIP file contains the first set of post-processed plotfiles for VOC toxic pollutants. An additional stage of post-processing was performed on the plotfiles for toxic pollutants to include a risk calculation, based on the risk-based concentrations (RBC) contained in a spreadsheet obtained from Region III. These results are presented in files beginning with 'RISK', such as RISK15-1.ZIP (1 of 2) for the risk plotfiles for VOC toxic pollutants with pollutant IDs of 150 or less. Since not all of the pollutants modeled were included in the RBC spreadsheet, there are fewer risk files than there are plotfiles.

Below is a list of the data files provided with this report, with a brief description of the file contents. The files were provided in a zipped (i.e., compressed) form. Files that were too large to fit on a single 3.5-inch high density (1.44MB) diskette were separated into files of 1.44MB or less using a utility program. The utility program modifies the prefix for the original zip file by adding a sequential number, such as '-01' where ten or more files are needed, or '-1' if less than ten files are needed. For example, the ZVOCP-01.ZIP file containing the post-processed plot files for VOC pollutants, which is almost 32 MB, was divided into 23 separate files called ZVOCP-01.ZIP, ZVOCP-02.ZIP, etc.

Disk#	Filename ext	File size	Date	Time	Description
1	AREAPROC ZIP	89,192	10-21-94	11:35a	Data files for area source post-processing
1	AREARUNS ZIP	180,332	10-19-94	2:30p	Area source model input and output files
1	AREA_PM ZIP	8,879	10-24-94	1:39p	PM area source toxic profiles (AREA_PM.DBF)
1	AREA_VOC ZIP	51,491	11-15-94	5:58p	VOC area source toxic profiles (AREA_VOC.DBF)
2	CORUNS-1 ZIP	1,353,256	10-19-94	4:46p	CO model input and output files (1 of 2)
3	CORUNS-1 ZIP	860,595	10-19-94	4:46p	CO model input and output files (2 of 2)
4	CRITMOD2 ZIP	14,578	01-03-95	12:11p	Point source inventories for criteria pollutants
4	ISCLT2A ZIP	321,360	10-18-94	1:53p	Source code and executable for modified ISCLT2 model
4	METDATA ZIP	578,915	11-15-94	5:46p	Preprocessed meteorological data files
4	NO2RUNS ZIP	192,699	10-19-94	4:57p	NO2 model input and output files
5	PM-INP ZIP	428,665	10-22-94	4:05p	PM toxic point source input files

Disk#	Filename ext	File size	Date	Time	Description
5	PM10RUNS ZIP	992,321	10-19-94	5:01p	PM10 model input and output files
6	PMTXOUT ZIP	814,617	11-15-94	5:49p	PM toxic point source output files
6	PMWK1 ZIP	13,337	10-21-94	4:40p	PM toxic inventories for additional sources
6	PM_SPEC ZIP	10,518	12-09-94	1:35p	PM point source toxic inventory (PM_SPEC.DBF)
7	POSTPROG ZIP	1,261,155	01-03-95	10:17a	Post processing programs (source and exe files)
8	PT0-OU-1 ZIP	1,448,728	10-21-94	1:18p	VOC toxic point source outputs for 000-series (1 of 2)
9	PT0-OU-2 ZIP	765,363	10-21-94	1:18p	VOC toxic point source outputs for 000-series (2 of 2)
10	PT1-OU-1 ZIP	1,454,387	10-21-94	1:19p	VOC toxic point source outputs for 100-series (1 of 2)
11	PT1-OU-2 ZIP	300,994	10-21-94	1:19p	VOC toxic point source outputs for 100-series (2 of 2)
12	PT2-OU-1 ZIP	1,452,446	10-21-94	1:21p	VOC toxic point source outputs for 200-series (1 of 2)
13	PT2-OU-2 ZIP	53,631	10-21-94	1:21p	VOC toxic point source outputs for 200-series (2 of 2)
14	PT3-OUT ZIP	1,428,987	10-21-94	1:22p	VOC toxic point source outputs for 300-series
15	PT4-OUT ZIP	1,083,327	10-21-94	1:24p	VOC toxic point source outputs for 400-series
16	PT5-OUT ZIP	259,253	10-21-94	1:25p	VOC toxic point source outputs for 500-series
17	RISK15-1 ZIP	1,409,046	10-22-94	10:31a	Risk plotfiles for VOC pollutants up to 150 (1 of 4)
18	RISK15-2 ZIP	1,383,881	10-22-94	10:31a	Risk plotfiles for VOC pollutants up to 150 (2 of 4)
19	RISK15-3 ZIP	1,420,583	10-22-94	10:31a	Risk plotfiles for VOC pollutants up to 150 (3 of 4)
20	RISK15-4 ZIP	920,579	10-22-94	10:31a	Risk plotfiles for VOC pollutants up to 150 (4 of 4)
21	RISK30-1 ZIP	1,426,970	10-22-94	10:31a	Risk plotfiles for VOC pollutants up to 300 (1 of 2)
22	RISK30-2 ZIP	786,614	10-22-94	10:31a	Risk plotfiles for VOC pollutants up to 300 (2 of 2)
23	RISK600 ZIP	804,122	10-22-94	11:00a	Risk plotfiles for VOC pollutants up to 600
24	RISKPM-1 ZIP	1,453,220	01-03-95	9:55a	Risk plotfiles for PM pollutants (1 of 2)
25	RISKPM-2 ZIP	389,631	01-03-95	9:55a	Risk plotfiles for PM pollutants (2 of 2)
26	SO2RUN-1 ZIP	1,392,382	10-19-94	4:53p	SO2 model input and output files (1 of 2)
27	SO2RUN-2 ZIP	895,662	10-19-94	4:53p	SO2 model input and output files (2 of 2)
28	STIFILS ZIP	743,808	10-21-94	8:41a	Stack input files (SO pathway cards) by pollutant
28	SUMMARY ZIP	8,068	10-21-94	11:47a	Maximum concentrations by pollutant
28	VLIFILS ZIP	35,844	11-15-94	5:53p	Volume source files (SO pathway cards) by pollutant
29	VOCINP-1 ZIP	1,451,660	10-20-94	12:02p	Model input files for VOC toxics (1 of 4)
30	VOCINP-2 ZIP	1,453,682	10-20-94	12:02p	Model input files for VOC toxics (2 of 4)
31	VOCINP-3 ZIP	1,452,460	10-20-94	12:02p	Model input files for VOC toxics (3 of 4)
32	VOCINP-4 ZIP	168,853	10-20-94	12:02p	Model input files for VOC toxics (4 of 4)
32	VOCWK1 ZIP	11,820	10-21-94	4:36p	VOC toxic inventories for additional sources
32	VOC_MOD2 ZIP	12,179	10-21-94	5:07p	VOC point source characteristics with substitutions
32	VOC_SPEC ZIP	309,755	01-03-95	11:23a	VOC point source toxic inventory (VOC_SPEC.DBF)
32	ZCOPLT ZIP	53,252	10-19-94	12:53p	Post-processed CO plotfiles (1-hr and 8-hr)
32	ZNO2PLT ZIP	30,003	10-20-94	2:32p	Post-processed NO2 plotfiles (annual)
33	ZPMPLT-1 ZIP	1,453,563	10-21-94	2:45p	Post-processed PM toxic plotfiles (1 of 2)
34	ZPMPLT-2 ZIP	495,890	10-21-94	2:45p	Post-processed PM toxic plotfiles (2 of 2)
34	ZPMTPLT ZIP	54,278	10-20-94	5:13p	Post-processed PM10 plotfiles (24-hr and annual)
34	ZSO2PLT ZIP	42,417	11-29-94	11:43a	Post-processed SO2 plotfiles (3-HR, 24-hr and annual)
35	ZVOC-01 ZIP	1,456,594	10-20-94	9:41a	Post-processed VOC toxic plotfiles (1 of 23)
36	ZVOC-02 ZIP	1,457,627	10-20-94	9:41a	Post-processed VOC toxic plotfiles (2 of 23)
37	ZVOC-03 ZIP	1,448,301	10-20-94	9:41a	Post-processed VOC toxic plotfiles (3 of 23)
38	ZVOC-04 ZIP	1,457,651	10-20-94	9:41a	Post-processed VOC toxic plotfiles (4 of 23)
39	ZVOC-05 ZIP	1,456,348	10-20-94	9:41a	Post-processed VOC toxic plotfiles (5 of 23)
40	ZVOC-06 ZIP	1,445,330	10-20-94	9:41a	Post-processed VOC toxic plotfiles (6 of 23)
41	ZVOC-07 ZIP	1,457,160	10-20-94	9:41a	Post-processed VOC toxic plotfiles (7 of 23)
42	ZVOC-08 ZIP	1,457,557	10-20-94	9:41a	Post-processed VOC toxic plotfiles (8 of 23)
43	ZVOC-09 ZIP	1,457,444	10-20-94	9:41a	Post-processed VOC toxic plotfiles (9 of 23)
44	ZVOC-10 ZIP	1,456,845	10-20-94	9:41a	Post-processed VOC toxic plotfiles (10 of 23)
45	ZVOC-11 ZIP	1,454,890	10-20-94	9:41a	Post-processed VOC toxic plotfiles (11 of 23)
46	ZVOC-12 ZIP	1,455,863	10-20-94	9:41a	Post-processed VOC toxic plotfiles (12 of 23)
47	ZVOC-13 ZIP	1,457,598	10-20-94	9:41a	Post-processed VOC toxic plotfiles (13 of 23)
48	ZVOC-14 ZIP	1,457,124	10-20-94	9:41a	Post-processed VOC toxic plotfiles (14 of 23)
49	ZVOC-15 ZIP	1,457,261	10-20-94	9:41a	Post-processed VOC toxic plotfiles (15 of 23)
50	ZVOC-16 ZIP	1,457,623	10-20-94	9:41a	Post-processed VOC toxic plotfiles (16 of 23)
51	ZVOC-17 ZIP	1,456,319	10-20-94	9:41a	Post-processed VOC toxic plotfiles (17 of 23)
52	ZVOC-18 ZIP	1,456,776	10-20-94	9:41a	Post-processed VOC toxic plotfiles (18 of 23)
53	ZVOC-19 ZIP	1,448,681	10-20-94	9:41a	Post-processed VOC toxic plotfiles (19 of 23)
54	ZVOC-20 ZIP	1,457,334	10-20-94	9:41a	Post-processed VOC toxic plotfiles (20 of 23)
55	ZVOC-21 ZIP	1,457,650	10-20-94	9:41a	Post-processed VOC toxic plotfiles (21 of 23)
56	ZVOC-22 ZIP	1,456,115	10-20-94	9:41a	Post-processed VOC toxic plotfiles (22 of 23)
57	ZVOC-23 ZIP	916,849	10-20-94	9:41a	Post-processed VOC toxic plotfiles (23 of 23)